Electronic Supporting Information

for

Improvement of durability of an organic photocatalyst in selective oxygenation of p-xylene by addition of a Cu(II) complex

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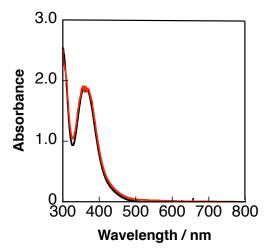


Fig. S1 UV-vis spectra of an NaI-saturated acetonitrile solution (2.0 mL) to which an acetonitrile solution containing 7.6 mM H_2O_2 (20 μ L, black) or an acetonitrile solution containing 1.0 mM [(tmpa)Cu^{II}]²⁺ and 7.6 mM H_2O_2 (20 μ L, red) was added. The absorption band appeared at 361 nm is ascribed to formation of I_3^- (ε = 2.5 × 10⁴ M⁻¹ cm⁻¹) by following reactions.

$$2 I^{-} + H_{2}O_{2} \longrightarrow I_{2} + 2 OH^{-}$$

 $I_{2} + I^{-} \longrightarrow I_{3}^{-}$